NORDIC UNIVERSITY DAYS 2022

EVENT REPORT





TABLE OF CONTENTS

ABOUT NORDIC UNIVERSITY DAYS 2022	3
Key messages for the Nordic University Days 2022	3
MONDAY 26th SEPTEMBER 2022	4
Brief summary of the day	4
Visions for 2030: European Research, Innovation and Education	4
European Strategy for Universities; synergies and possibilities	5
European Research Area revitalised & European Innovation Agenda; a renewed framewor cooperation in science and innovation	
TUEDAY 27 th SEPTEMBER 2022	8
Brief summary of the day	8
Research, Innovation, and Education for Green and Digital Transition	8
Europe in the world – International research and innovation cooperation	9
Key Nordic Recommendations for Excellence in the European cooperation on educa research, and innovation	
APPENDIX 1: NORDIC UNIVERSITY DAYS 2022 - KEY MESSAGES	12
1. Academic freedom and values; a priority for Nordic universities	12
2. Science-based policy making	12
3. Joint implementation of the European Research Area and European Education Area	13
4. Research and education based on excellence	13
5. Universities in a global landscape	14
6. The future of EU research and innovation programmes: excellence and openness	14
APPENDIX 2: PRESENTATION SLIDES BY SIGNE RATSO, ACTING DIRECTOR-GENERAL, DG R&I	15
APPENDIX 3: EUROPEAN COMMISSION VICE-PRESIDENT MARGRETHE VESTAGER SPEECH	24
APPENDIX 4. FUROPEAN RESEARCH COUNCIL PRESIDENT MARIA LEPTIN SPEECH	26

The Nordic University days are organised by the Nordic University Association in collaboration with the Brussels offices of the following universities/university representatives















ABOUT NORDIC UNIVERSITY DAYS 2022

The Nordic university days 2022 were held under the presidency of Iceland of the Nordic university association. Nordic University Days (henceforth NUD) 2022 took place 26th – 27th of September in Brussels, following the successful first event in 2019. The general purpose of NUD 2022 was to:

- Raise awareness of Nordic universities' positions on EU research and education policy agendas.
- Position Nordic universities in the context of the revived European Research Area (ERA) and the development of the European Education Area (EEA).
- Showcase Nordic universities' strengths in relation to policy agendas such as: sustainability/green transition, climate sciences, citizen science, gender equality andscience-based policymaking, among others.
- Build knowledge about EU research and education policy priorities, funding programmes and networks.

Further, NUD 2022 formed a platform for dialogue between the rectors and European decision-makers. The programme included interactive seminars with representatives from: DG Research and Innovation; DG Education, Youth, Sports and Culture; European research Council; the Swedish permanent representation to the European Union; Members of the European Parliament as well as a dinner reception programmed by the Icelandic Rectors´ Conference hosting Executive Vice-President of the European Commission Margrethe Vestager and representatives from the Icelandic Embassy.

The programme organisers of this year's Nordic University Days were Gothenburg European Office, Greater Copenhagen EU Office, Norwegian University of Science and Technology (NTNU) Brussels Office, Universities in South Sweden Brussels Office, University of Bergen (UiB) Brussels Office, University of Eastern Finland EU Office, University of Helsinki and the Icelandic Rectors' Conference.

Disclaimer: this report contains short summaries of each of the meetings, as well as the key messages highlighted during each session, as understood by the programme organisers. The speakers are not to be held accountable for the content based on the programme organisers perception of the discussion.

Key messages for the Nordic University Days 2022

These were the Key Messages that were identified prior to Nordic University Days 2022 (see the Key Messages in full detail in Appendix 1)

- 1. Academic freedom and values; a priority for Nordic universities
- 2. Science-based policy making
- 3. Joint implementation of the European Research Area and European Education Area
- 4. Research and education based on excellence
- 5. Universities in a global landscape
- 6. The future of EU research and innovation programmes: excellence and openness

MONDAY 26TH SEPTEMBER 2022

Brief summary of the day

The first session of the day was introduced by Jón Atli Benediktsson (Rector of the University of Iceland and Chair of the Nordic University Association) and focused on what the European Knowledge area could become. During this session the <u>European Research Area</u>, <u>European Education Area</u> (EEA), the <u>new European Innovation Agenda</u> (EIA) and the <u>European Strategy of Universities</u> were explored.

The morning continued with <u>Visions for 2030: European research, Innovation and Education</u> by keynote speaker Ambassador Torbjörn Haak (Permanent Representation of Sweden to the European Union).

The second session, <u>European Strategy for Universities</u>; <u>synergies and possibilities</u>, by keynote speaker Vanessa Debiais-Sainton (Head of Unit Director General, DG Education, Youth, Sport and Culture, European Commission) explored the next steps of the strategy.

The third meeting of the day, <u>European Research Area revitalised & European Innovation Agenda</u>; <u>a renewed framework for cooperation in science and innovation</u>, concerned the European research policy anchored in the ambition to establish a European Research Area that facilitates a single market for research and innovation as well as free movement of knowledge and researchers in the European Union. In addition, the meeting also explored the recently published European Innovation Agenda. The external guest speaker was Signe Ratso (Acting Director-General of DG Research & Innovation in the European Commission).

The day finished with a reception at the EFTA house, which was hosted by Ambassador and Head of the Mission of Iceland Kristjan Andri Stefánsson. Ambassador Stefánsson began the evening by discussing the role of research and education in solving global challenges – specifically in the green and digital transition.

Further, European Commission Executive Vice-President Margrethe Vestager held a speech (which can be read in full here), which focused on the human-centric side of digitalisation. During her speech, Vice-President Vestager emphasised that people, excellence, and inclusion form the most important traits of the digital transition – with 2023 being declared the European Year of Skills. Rector Jón Atli Benediktsson rounded-up the day by emphasising the need for science-based solutions as part of the green and digital transition.

Visions for 2030: European Research, Innovation and Education

Agneta Marrell (Rector, Jönköping University) introduced the keynote speaker Ambassador Torbjörn Haak. Rector Agneta Marell (Jönköping University) and Hans Adolfsson (Rector, Umeå University) hosted the Q&A session.

The objectives of the session were to inspire interaction with and between the Rectors and discuss the upcoming Swedish presidency of the Council of Ministers as well as the future for research, innovation, and higher education – and what role Nordic universities can play in this development.

Ambassador Torbjörn Haak began his speech by explaining the context within which the Swedish permanent representation is working – with a significant number of initiatives launched by the European Commission, such as the European Green Deal, the digital transition, and the social agenda – all of which were cast up by the Russian invasion of Ukraine on the 24th of February. Further, the Swedish Presidency of the Council of Ministers is coming up in January 2023. Some of the key points made during this session were:

- While the agenda of the European Commission changed with the Russian invasion of Ukraine, the priorities of the green transition did not change – there is still a strong commitment to move away from fossil fuel towards green technology.
- The invasion of Ukraine has both decreased and reinforced the EU priorities in the climate transition: while fossil fuel dependency might increase in the short-term, it must decrease in the long term.

- In response to current trend of rising geopolitical tensions and academic freedom being under attack
 in many countries as well as many EU member states the EU should promote rule-based
 multilateralism.
- The uncertainty of the energy challenge makes it difficult to predict where we will be in six months and will inevitably lead to some degree of flexibility – with all emergency measures being very short notice
- [on the European Knowledge Areas and the different strategic pillars]: it **might take some time to** implement the concrete measures and before we see the effects for universities.
- European Commission President Ursula Von der Leyen announced in her <u>State of the European Union</u> speech in mid-September 2022 that **2023 will be the European Year of Skills**. What this means will be made more concrete with the publishing of the European Commission Work Programme in late October.
- Openness and networks are significant to excellence in research
- [on the link to the upcoming Swedish presidency]: Two of the 20 European Research Area (ERA) actions are of especially significant importance according to Sweden "open access" and "research infrastructures".
- Finding a systemic solution for research infrastructures to tackle the dangers of data sharing is one of the priorities of the Czech Republic.
- Universities are crucial in the upscaling of innovation both as incubators and creating the right skills

Some of the specific Legislative Acts that Ambassador Haak mentioned:

- Proposal for an EU Data Act
- European Critical Raw Materials Act
- Communication on the European Education Area

During the ensuing Q&A session, the following key points were made:

- We need to look at our societies and work on our day-to-day contacts with organisations throughout Europe and nurture our culture of respect for fundamental rights – including those of academic freedom.
- In recent years there has been a slight shift from transparency and openness to strategic autonomy and the resilience of the European Union in many member states.
- [Regarding the costs of open science]: Currently, the EU is exploring the potential for creating a framework for the exchange of data. Open data is important because of, for instance, its role during the COVID-19 pandemic, the climate transition and so on it would be unfortunate if the costs led to protectionism.

European Strategy for Universities; synergies and possibilities

This session was introduced and hosted by Antti Syväjärvi (Rector, University of Lapland) who also moderated the dialogue between the audience and the keynote speaker during the Q&A session.

The objective of this session was to bring momentum to the European Strategy for Universities and the four flagship initiatives. Further, the aim was to inspire the Rectors that were present at the conference to take part in implementing and developing the shared European Education Agenda.

The Keynote presentation by Vanessa Debiais-Sainton (Head of Unit Director General, DG Education, Youth, Sport and Culture, European Commission) focused on the <u>European Strategy for Universities</u>, which was launched in January 2022 and presented as a bridge between the European Education Area, the European Research Area and the European Area for Higher Education (Bologna Process). Further, the strategy was complemented with four flagship initiatives to be implemented by mid-2024:

- Expand to 60 European Universities with more than 500 higher education institutions by mid-2024, with an Erasmus+ indicative budget totaling €1.1 billion for 2021-2027. The aim is to develop and share a common long-term structural, sustainable, and systemic cooperation on education, research, and innovation, creating European inter-university campuses where students, staff and researchers from all parts of Europe can enjoy seamless mobility and create new knowledge together, across countries and disciplines.
- Work towards a **legal statute for alliances of higher education institutions** to allow them to pool resources, capacities, and their strengths, with an Erasmus+ pilot as of 2022.
- Work towards a joint European degree to recognise the value of transnational experiences
 in the higher education qualification the students obtain and cut the red tape for delivering joint
 programmes.
- **Scale-up the European Student Card initiative** by deploying a unique European Student Identifier available to all mobile students in 2022 and to all students in universities in Europe by mid-2024, to facilitate mobility at all levels.

Some of the key points made during this session included:

- The European Strategy for Universities should empower the universities to become actors of change in the digital transition and support both inclusion and excellence.
- As a next step, the European Strategy for Universities should **expand to support 60 European University Alliances** with calls in 2023 and 2024.
- Currently, an initiative for **creating legal status for alliances of higher education institutions** (to allow them to pool resources) has been initiated and **a proposal for Erasmus+ has been launched**.
- Scaling up the European Student Card initiative has been challenging, and more progress needs to be made. Here, Nordic Universities that traditionally take a very student-centred approach can provide input.

In the ensuing Q&A, the following points where made:

- The European Commission is keen to bring education and innovation together and, following the outcome of the <u>European Education and Innovation Summit 2022</u>, will open up for **knowledge exchange in October 2022 via the European research Initiative**.
- In both the European Strategy for Universities and the Council Recommendations for more efficient cooperation within higher education, it is recommended that higher education institutions gain more freedom when it comes to integrating digitalisation.
- Having only one commissioner for research and education helps to change both practice and mindset.
- Currently, the European Strategies tend to focus more on women in STEM, however we see an **increasing need to focus on the gender gap in education**. The European Commission hopes to tackle this in the Roadmap on Gender Equality.
- We foresee a change in the Erasmus+ programme to facilitate receiving funding for collaboration projects.
- The EUIs need to be formed in such a way that it matches the needs and levels of engagement
 of the universities the goal of the alliance is to be stronger together and creating added-value for
 the researchers.

European Research Area revitalised & European Innovation Agenda; a renewed framework for cooperation in science and innovation

This session was introduced and hosted by Anne Marie Kanstrup (Pro-rector, Aalborg University). Keynote speaker was Signe Ratso (acting Director-General, DG Research and Innovation, European Commission). Anne Marie Kanstrup also moderated the dialogue between the audience and acting Director-General Signe Ratso during the Q&A session.

The objective of the session was to 1) improve the understanding of the European Research Area policy priorities and their relevance for the university sector and 2) communicate and discuss key messages and perspectives of EU research policy prepared by the Nordic University Association.

During her keynote speech, acting Director-General Signe Ratso discussed the <u>European Research Area Policy Agenda and its actions for the period 2022 – 2024</u>, highlighting the role of Nordic universities in implementing these. Special attention was given to academic freedom (specific ERA action 6) and strategic autonomy (specific ERA Action 17), which were two of the Key Messages of Nordic University Days 2022. Her presentation slides can be found in Appendix 2.

Some of the key points made during this session were:

- [on specific ERA Action 4: promote attractive and sustainable research careers, balanced talent circulation and international, transdisciplinary and intersectoral mobility across the ERA]: political momentum in the member states is needed to create support for the framework implemented by the European Commission
- [on the European Strategy for Universities]: creates close interlinkages between the ERA and the EEA. We can see a decrease of research-intensive universities in Europe **our higher education institutions need to remain competitive at the global scene**
- [on specific ERA Action 13: *empower higher education institutions to develop in line with the ERA, and in synergy with the EEA*]: **we need to strengthen research careers**
- [on the European Innovation Scoreboard 2022]: Sweden, Finland and Denmark continue to hold leading positions how can this be utilised in the rest of Europe?
- [on the new European Innovation Agenda]: how can we accelerate and **strengthen innovation in European innovation ecosystems** and at the same time **address the innovation divide**?
- Deep tech innovation has the potential to both improve Europe's competitiveness as well as narrowing the innovation divide.
- [on the Global Approach of R&I]: Our approach continues to **be open to countries outside of the European Union**.

In the ensuing Q&A session some of the following points were made:

- [on the five flagships in the new European Innovation Agenda]: innovation in the public sphere necessitates some **trade-offs especially when using both public and private financing**.
- There are especially big synergies between ERA and EEA in terms of research careers.
- Trade-off between working with like-minded countries and diverse perspectives.

TUEDAY 27TH SEPTEMBER 2022

Brief summary of the day

The second day of Nordic University Days began with a breakfast seminar with Nordic Members of the European Parliament (MEPs) on the topic <u>Research, Innovation, and Education for the Green and Digital Transition</u>. The session touched upon societal debate, European Parliament hearings, Excellence & Strategic autonomy and curiosity-driven versus applied research.

The MEP breakfast was followed by the session <u>Europe in the world – International research and innovation cooperation</u> with keynote speaker Director Maria Cristina Russo from DG Research & Innovation, European Commission. The session focused on the Global Approach, multilateral alliances, the promotion of values, multilateral dialogues, and openness.

The final session of the day, <u>Key Nordic Recommendations for Excellence in the European cooperation on education, research, and innovation</u>, aimed to both inspire a continued dialogue and summarise the conference.

Research, Innovation, and Education for Green and Digital Transition

This session was introduced and hosted by Maria Knutson Wedel (Vice-chancellor, Swedish University of Agricultural Sciences. MEP Christel Schaldemose (Group for the Progressive Alliance of Social Democrats, S&D) was the session's first keynote speaker, with second and third keynotes given by Ragnhildur Helgadóttir (President, Reykjavik University) and Jens Ringsmose (Rector, University of Southern Denmark). Maria Knutson Wedel moderated the ensuing Q&A session with the audience.

The objective of the session was to 1) raise awareness and position Nordic universities towards Members of the European Parliament and, 2) provide Key Messages that showcase the Nordic region and university sector in the EU.

The keynote presentations and panel discussion with MEP Christel Schaldemose, Ragnhildur Helgadóttir and Jens Ringsmose focused on the relationship between politics and research. Some of the key points made during this session included:

- Members of the European Parliament (MEPs) have regular discussions with scientists and rely on research results for what is possible to achieve. This cooperation could be enhanced – and researchers should not be afraid to reach out. At the same time, there is a risk that researchers are drawn into political discussions where they do not belong.
- Science-based policy making requires strong interdisciplinary evidence base. Lack of time and resources and lack of incentives from policy makers pose challenges.
- It is crucial to all high-quality research that the **Principle of Excellence is applied in research** investments.
- **Increasing the budget for the Erasmus+ Programme** will help implement the Strategy for Universities that was published earlier this year.

During the meeting, a questions and answer (Q&A) session followed the keynote presentations by MEP Christel Schaldemose, President Ragnhildur Helgadóttir and Rector Jens Ringsmose. Some of the key points that were made during the Q&A include:

• The EU Programmes are useful in supporting the University Alliances across Europe.

- However, recently the debate has started on whether the EU has moved too much in the direction of applied science, to solve societal challenges, and away from curiosity-driven basic research. The first challenge is to **strike a balance**. The second challenge is to valorise curiosity-driven research.
- Universities could consider sending information directly to MEPs, in the form of newsletters, to keep them informed on recent scientific progress and help shape science-based politics. In politics, the validity of an argument is sometimes unclear science can help here.
- The Nordic Universities could be better represented in European Parliament committee hearings.
- Challenge in communicating scientific results due to uncertainty built into the research methods
- Academic Freedom is a prerequisite for excellent science

Europe in the world - International research and innovation cooperation

The session was chaired by President Ole Petter Ottersen (Karolinska Institutet) and moderated by Rector Anne Borg (NTNU). The keynote speaker was Director Maria Cristina Russo (Director General of DG Research and Innovation, European Commission).

The objective of the session was twofold: 1) to improve the understanding of the EU approach to international cooperation in science and innovation and its implications for Horizon Europe and, 2) to communicate and discuss key messages and perspectives in international research cooperation prepared by the Nordic University Association.

The meeting with Maria Cristina Russo, Director General of DG Research and Innovation, gave an overview of the EU Global Approach policy, which guides international cooperation in science and innovation. Some of the key points made during this session included:

- The **Global Approach to Research and Innovation** will remain as open as possible, but new measures will be introduced for creating restrictions where necessary
- Use international cooperation to move forward with EU strategic interest
- Special attention will be given to **multilateral alliances to foster health innovation** and the **twin transition**. The **Atlantic Cooperation** is an example of a well-functioning multi-lateral alliance, where partners have been added and additional areas for cooperation are still being identified.
- Currently, the European Commission is discussing a Roadmap for the Science & Technology
 Agreement between the EU and China, where progress has been made in cooperation with China
 in fields such as food security, climate change and energy. Still, more remains to be done
 regarding the Framework Partnership Agreement (FPA) with China.
- The <u>new EU-AU Innovation Agenda</u> reconfirms the central role of research and innovation (particularly in the field of health, food security and energy) and Horizon Europe in the cooperation between the EU and Africa. It is also a central building block of the EU external policy.

It was concluded that many of the guiding principles in the Global Approach are in line with the Key Messages prepared for the Nordic University Days. For instance, Academic Freedom (Key Message 1) is a pillar for the EU research and innovation policy, which was emphasised by European Commission President Ursula Von der Leyen's in her State of the European Union speech. Further, EU Research and Innovation Policy is and should remain "open to the world", which is in line with Key Message 6 (The future of EU research and innovation Programmes: Excellence and Openness). At the same time, balancing these areas against the risk of foreign interference remains a challenge.

The Q&A session that followed focused on openness, foreign interference, the exclusion of Russia from the EU framework programmes, academic freedom and "European" versus "Common" values. Some of the key points made in the discussion were:

- The EU should continue to underpin the openness to the rest of the world. Excellence has everything to do with a richness of perspectives.
- Foreign interference versus. Political interference which impact do the researchers experience most?
- The EU launched a multilateral dialogue with all strategic partners regarding association to Horizon Europe. More than 60 countries participated (including US, Canada, Japan, India, and China). All Russian entities were blocked from participation due to the specific provision of sanctions made by EU. Research policy is an extension of EU external policy.
- In ensuring that discoveries made by the universities can be used for good, **EU Intellectual Property Legislation should rather be « flexible »** than « smart ».
- The rectors and vice-rectors are invited to a **Stakeholder consultation on the EU-AU agenda**.

Key Nordic Recommendations for Excellence in the European cooperation on education, research, and innovation

The session was hosted by Rector Jón Atli Benediktsson, who presented the keynote speaker Maria Leptin (President of the European Research Council, ERC) and moderated the dialogue between the speakers Maria Leptin, and representatives of their respective national rectors' conferences, Astrid Söderbergh Widding (President, Stockholm University), Sari Lidblom (Rector, University of Helsinki), Sunniva Whittaker (Rector, University of Agder), Hanne Leth Andersen (Vice-chancellor, Roskilde University).

The objectives of this session were to continue inspiring and implementing the Key Messages – with special attention given to academic freedom.

Maria Leptin (President for the European Research Council, ERC) focused her presentation on "Excellence in research -quo vadis?" (read her speech in full here) where some of the key points made during this session were:

- While the <u>Agreement on Reforming Research Assessment</u> might be considered a step to move away from "Excellence" **the final form of the agreement is more balanced** and requires qualitative indicators that are based on peer-review.
- **ERC aims to support researchers to work on the best ideas** and will continue to do so. It also has mechanisms for collecting feedback from the research community to continuously tweak their work programme.
- **Selecting projects based on "excellence" works**. To allow breakthroughs to happen, we need incremental research.
- **Freedom of research is essential**, and it is a concern that this right is contested.
- While it is easier for politicians to motivate funding applied research, there is also a greater understanding for the need of curiosity-driven research, especially following the COVID-19 pandemic.
- Out of 2500, 843 EU publications in IPCC report came from ERC projects which is not bad for projects chosen bottom-up.

- **ERC want to convince EU policy makers to invest more in research**, since they are unable to finance all projects that their evaluation panel considers excellent.
- Scientific progress relies on international collaboration and knowledge spreading. Science is about understanding the world, which is why there is no such thing as American vs. European science. At the same time, we cannot ignore politics as is the case of the Russian attack on Ukraine.

During the moderated dialogue between Maria Leptin, Jón Atli Benediktsson, Astrid Sörderbergh Widding, Sari Lindblom, Hanne Leth Andersen and Sunniva Whittaker, and the Q&A with the audience, the following points were raised:

- Scientific discoveries must be shared with respect to avoid scientific appropriation.
- Basic research is not threatened, but (EU) priorities tend to shift towards innovation that should respond to the societal challenges.
- It can be difficult to separate basic and applied research, since all research can have innovative power and societal effects. However, estimating when and to what value at a specific time is difficult.
- We must keep in mind that **research is also a cultural activity**, by funding research the EU funds the young researchers working in the laboratories. There is a level of respect for this which we saw earlier this year with the <u>pictures of galaxy formation</u> from NASA's James Webb Space Telescope.
- Listening to people outside of our echo-chamber is the only way for our organisations to stay adaptive in a changing external environment

00

Nordic University Days @nordicunidays · 27 sep.

Ending yet another successfull #NordicUniDays! We can look back on two insightful days here at #NordicUniDays with multiple plenaries with the goal of strenghtening the bond between Nordic Universities and the #EU Thank you to all participants.



Figure 1: shows the tweet from @nordicunidays marking the end of yet another successful NUD.

APPENDIX 1: NORDIC UNIVERSITY DAYS 2022 - KEY MESSAGES

1. Academic freedom and values; a priority for Nordic universities

Academic freedom and institutional autonomy are fundamental for Nordic universities to develop knowledge and science which is needed to solve global challenges. Freedom of teaching and learning, freedom in carrying out research without commercial or political interference, freedom to disseminate and publish one's research findings, freedom from institutional censorship, including the right to express one's opinion publicly about the institution or the education system in which one works. Lastly, freedom to participate in professional and representative academic bodies, including trade unions should be accepted as a university core value.

Many Nordic universities are signatories of Magna Charta Universitatum5, supporting principles of academic freedom and institutional autonomy. However, academic freedom is not a given in a time where scientific findings are being discredited and universities' independence is being challenged – also in Europe. Academic freedom is an essential element of a democratic and free Europe and therefore a fundamental value of the EU and a principle of international cooperation. Institutional autonomy is a key component of academic freedom. Academic institutions should have the freedom to manage their core activities of research and teaching without fear of societal, political or religious interference that would impact scientific research or teaching.

Both the European Research Area (ERA) and the European Education Area (EEA) need to fortify and support in particular the efforts of academic organisations concerning academic freedom which is an indispensable prerequisite for social, political, cultural and economic progress and resilience and yet still today in acute danger in many countries.

Nevertheless, moving the discourse from Academic freedom to academic fundamental values allows the debate to become more inclusive. It allows for greater global partnerships funded on these values in contrast to the concept of 'European values' which remains undefined. Universities are global by nature, and so are their values.

2. Science-based policy making

As universities, we are aware that the knowledge that we produce serves as a key input for sustainable high-quality policymaking and regulation across policy areas, i.e., climate change, health crises as well as developing research priorities. For example, it requires a strong interdisciplinary scientific evidence base, across natural, technical, medical and social sciences and humanities to address the complexity of challenges that are part of the UN Sustainable Development Goals' roadmap towards 2030. Nordic universities are at the EU's disposal to contribute to help improve policies collectively and we are open to entering into dialogue with both the EU and the Member States on how to improve the structures of engagement of science-based policy.

The most frequently reported barriers in science-based policy making to relate to problems with disseminating high-quality information effectively namely because of lack of time, support, resources and incentives for scientists to engage in dissemination activities. Studies suggest that scientific evidence is often not presented at the correct time and scientists are unable to anticipate a demand for information to solve a specific problem quickly. Further, society sometimes lacks the research skills to understand scientific evidence. Scientific evidence and research should be an important component of policymaking and therefore be addressed through the ERA actions such as action 7 knowledge valorisation and action 14 citizen science.

It is an increasing problem that researchers who contribute with scientific evidence to policy-making processes and engage in public debates risk being victims of harassment and threats, as seen during the COVID-19 pandemic. This is a tendency, which may undermine academic freedom if researchers refrain from contributing to science-based policy due to the potential personal costs of doing so. This can also harm the attractiveness of choosing a research career.

In addition, the time horizons of basic research need to be better understood by policymakers. The ERA should place more emphasis on the so-called "curiosity and blue skies" research, as their long-term funding and development are critical for society and its citizens, both in Europe and in the rest of the world.

The representatives from the EU institutions invited us to continue dialogue to form evidence-based policy. It is in our hands to develop our research communication to foster a better debate. Despite research results never being 100% we need to communicate why this is to counter the development of research resistance.

3. Joint implementation of the European Research Area and European Education Area

Higher education and research policy are primarily national competencies and in accordance with the subsidiarity principles, joint EU initiatives should bring added value to address common challenges. Actions and reforms proposed by the European Commission have a better chance of succeeding if the Commission's plans are aligned with the needs of the Member States and the respective Higher Education system. Without an alignment, there is a risk that the reforms will not materialise due to a lack of political or financial support. Therefore, it is crucial to have a proactive national debate on the strategic objectives of EU research and education policies and their alignment with national objectives and universities' long-term strategic objectives.

Preparations for actions should be based on the views and concerns expressed by universities, and jointly seek solutions at both national and EU levels if harmonisation and compatibility between higher education systems within Europe should be achieved. The EU has a role to play in encouraging new European education and research initiatives, but it is important that universities are included in the process of developing these and that they respond to an actual need and have an added value.

Universities are the main actors in implementing the ERA policy agenda and the European Strategy for Universities and therefore their perspectives and experiences should play a more prominent role in the decision-making process. Higher Education stakeholders should have a stronger say in designing and implementing the new ERA e.g., through the ERA Transition Forum and the ERA policy agenda. The European Higher Education stakeholder community will need to be involved in the development and implementation of the initiatives that will shape the universities of the future.

We look forward to the engagement we will have with our national implementing bodies of the ERA actions taking the driver's seat for some to form a European Research Area in which Universities can thrive.

4. Research and education based on excellence

Excellence must continue to be the primary principle guiding investments in research, education and innovation to enhance the sustainable growth and resilience of our societies. Quality and global excellence must be the criteria for which funding should be allocated. Excellent science is a must if we are to find solutions that can realise the green and digital transition in Europe and globally, and the challenges of the future.

Strengthening societal resilience based on greener, digital and sustainable solutions requires joint actions and investments in science and innovation, as well as participatory and empowered citizens. Blue-sky research, breakthrough technologies, social innovations and applications are required for the global transition to a greener and more digital society and it is needed to develop robust evidence that supports or rejects the added value and viability of solutions, approaches etc.

Universities enhance the green transition and wider societal impact through education. Universities empower learners of all ages with the knowledge, skills, values and attitudes to address the interconnected global challenges we are facing. The new ERA and the European Strategy for Universities have in large part been conceived to facilitate the contribution of European R&I to the twin transition.

5. Universities in a global landscape

To boost competitiveness and generate solutions to global societal challenges such as pandemics and climate change and deliver the twin transition, international R&I cooperation with partners outside Europe is essential. "Open to the world" should therefore remain the leading principle of Horizon Europe and the EU's approach to international collaboration.

Foreign interference in research and innovation is identified as a growing threat in an increasingly internationalised field. EU-level guidelines on foreign interference are important to raise awareness. The guidelines should first and foremost help universities develop comprehensive and preventive approaches for tackling all forms of interference and facilitate responsible collaboration.

The COVID-19 pandemic has made visible the critical role of international collaboration on the frontiers of science. The pandemic is also a robust example of how removing open science policy obstacles impacts the free flow of research data and ideas, and thus accelerates the pace of research, critical to combating the disease.

The EU should promote science collaboration globally and enter into strategic differentiated R&I partnerships with third countries based on common values and principles that promote the importance of academic freedom and institutional autonomy, research integrity & ethics, open science and gender equality. It is not only a matter of foreign interference; it is a matter of political interference which can be domestic as well as foreign.

6. The future of EU research and innovation programmes: excellence and openness

The EU's research and innovation programmes have long been the most international and open to the world. Openness is a necessity and should remain the core of Horizon Europe in the last three remaining years and the future. Global challenges can only be solved through global collaboration.

Excellence must continue to be the primary principle across Horizon Europe and in future EU research and innovation programmes. Quality and global excellence must be the criteria on which research funding should be allocated, from theoretical to problem-driven research and across all technology readiness levels.

Nordic universities are committed to preserving and protecting the freedom of research and to maintaining research environments that are open and that promote the free exchange of research results.

APPENDIX 2: PRESENTATION SLIDES BY SIGNE RATSO, ACTING DIRECTOR-GENERAL, DG R&I



Policy Framework



Pact for research and innovation in Furone

- 10 values and principles
 - 4 priority areas
 - Deepening ERABroadening ERA and relevance
 - Amplifying access to excellence
 - Advancing R&I investments and reforms
- Research and development targets



ERA Policy Agenda

- Designed to contribute to the priority areas of the Pact for R&I, setting out the voluntary ERA actions which are defined and coordinated at Union level.
- 20 actions for 2022-24



हिंदे[©] ERA Governance

ERA Forum (+ subgroups)

Expert group for coordination and implementation of the ERA, together with EU countries, Associated countries and stakeholders

ERAC

high-level strategic policy body, providing advice

Council

Decision making "Owner" of Policy Agenda

RA Monitorina

- Ensure a proper basis for evidence informed policy making
- Provide evidence and analysis in the context of the European Semester

ERA Policy Agenda: 20 actions

DEEPENING A TRULY FUNCTIONING INTERNAL MARKET FOR KNOWLEDGE

- 1. Open sharing of knowledge, incl. EOSC
- 2. Data legislation fit for research
- 3. Reform of research assessment
- 4. Strengthen research careers
- 5. Gender equality and inclusiveness
- 6. Protect academic freedom
- 7. Better knowledge valorisation
- 8. Research infrastructures
- 9. International cooperation, reciprocity

TOGETHER FOR TWIN GREEN AND DIGITAL TRANSITION, AND INCREASING SOCIETY'S PARTICIPATION IN THE ERA

- 10. R&I Missions and Partnerships for ERA
- 11. Green energy transformation
- 12. Transition of industrial ecosystems
- 13. Empower higher education institutions
- 14. Bring science closer to society



AMPLIFYING ACCESS TO RESEARCH AND INNOVATION EXCELLENCE ACROSS THE UNION

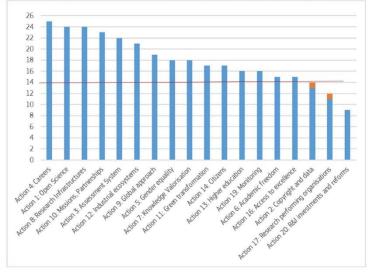
- 15. Regional and national R&I ecosystems
- 16. EU-wide access to excellence
- 17. Strategic capacity of public RPOs/RFOs

ADVANCING CONCERTED R&I INVESTMENTS AND REFORMS

- 18. Coordination national support for ERA
- 19. ERA monitoring mechanism
- 20. Prioritisation and coordination of R&I investments and reforms



Member States' commitment per action





ERA Action 4: Strengthening research careers

DEEPENING A TRULY FUNCTIONING INTERNAL MARKET FOR KNOWLEDGE

Action 4 – Promote attractive and sustainable research careers, balanced talent circulation and international, transdisciplinary and inter-sectoral mobility across the ERA

3 levels of activity

- 1. Development of a comprehensive European Framework for Research Careers
- Exchange of best practices on skills and mutual learning to support inter-sectoral mobility and more balanced talent circulation (e.g. ResearchComp, ERA4You)
- Support measures to improve attractiveness of research careers within and beyond academia (e.g. Research Careers Observatory, ERA Talent Platform)





ERA Action 13: *Empower higher education institutions* to develop in line with the ERA, and in synergy with EEA – Objectives:

Cooperation for excellence

- Raise excellence in science and in value creation through <u>integrated and inclusive</u> <u>cooperation</u> of higher education institutions
- Support implemention of i.a. ERA actions 1, 2, 3, 4, 5, 7, 8, 9, 15, 16 by HEI, in particular support digital transition and research careers

Global competitiveness

- · Improve global competitiveness and visibility of Europe's universities
- · Create critical mass in research and innovation in key policy areas



European Universities Initiative



Joint strategies for education and R&I
Challenge-based approach
Embedded and seamless mobility
Innovative pedagogies & flexible curricula
Sharing of resources, courses & infrastructure
Cooperation with surrounding ecosystems

- · 2019: 17* European Universities alliances from Erasmus+
- · 2020: 24 European Universities alliances from Erasmus+
- 2021: 39 alliances received complementary support from Horizon 2020
- 2022: 16 of *alliances receive consolidation support from Erasmus+ + 4 new alliances launched



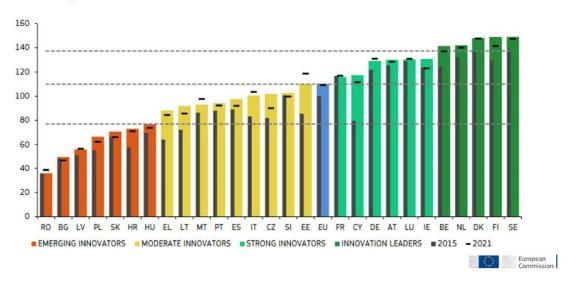
New European Innovation Agenda - context



New European Innovation Agenda: five flagships



European Innovation Scoreboard 2022



New European Innovation Agenda Accelerating & strengthening innovation in European Innovation Ecosystems & addressing the innovation divide

Challenges

- Innovation divide between regions has increased
- Diffusion of innovations and the uptake of breakthrough technologies including through inter-regional linkages remain sub-optimal
- Despite the existing structures and services there is a complex and fragmented European innovation ecosystem, hindering the ability of innovators to leverage the support and opportunities
- Unexploited potential in regional innovation ecosystems

Actions

- Establish and connect regional tech innovation valleys
- Commission notice on synergies between Horizon Europe and European Regional Development Fund programme
- 3. Double the number of Hydrogen Valleys
- Establish Innospace one stop shop for innovation ecosystems' players
- 5. Launch Scaleup 100



New European Innovation Agenda -Fostering, attracting & retaining talents

Challenges

- · EU appears to be losing the global race for talent with skilled researchers moving to US
- EU's working age population is shrinking due to demographic change
- · High concentrations of talents in main cities of EU MS leading to disparity between the needs of the economy and the availability of
- · Entrepreneurial networks and training is not equally accessible
- · Employee ownership remains at low levels across Europe

Actions

- 1. Launch EIT deep tech talent initiative
- 2. Launch innovation intern scheme
- 3. Launch an EU Talent Pool to help businesses, including startups, find non-EU talents
- 4. Establish Women Entrepreneurship and Leadership scheme
- 5. Best practice exchange on startup employees' stock options
- 6. Education and Innovation practice community
- 7. Launch Erasmus+ Alliances for Innovation
- 8. Launch Digital Europe call to train experts in future-oriented fields



University Strategy objectives

Strengthen the **European dimension** in higher education and research

Consolidate universities as lighthouses of our European way of life

for future-proof skills gender equality

Strengthen quality Foster diversity,

Promote and protect European democratic

Empower universities as key actors of change in the twin green and digital transitions

> Develop skills, competences and technological innovation for the green and digital transition

Reinforce universities as drivers of Europe's global role and leadership

Europe's connections with the world





Global approach to research & innovation

Europe's strategy for international cooperation in a changing world*

WHAT IS THE AIM OF THE GLOBAL APPROACH TO RESEARCH AND INNOVATION (R&I)?

To preserve openness in research and innovation international cooperation while promoting a level playing field and reciprocity underpinned by fundamental values.

To strengthen multilateral partnerships to deliver new solutions to green, digital, health and innovation challenges.

HOW WILL THIS BE ACHIEVED?

Modulating bilateral cooperation in line with European interests and values and EU's open strategic autonomy.

Accelerating sustainable and inclusive development, and the transition to resilient, knowledge-based societies and economies in low and middle-income countries.

Using a *Team Europe* approach, with actions by the EU, its financial institutions and Member States.

European Commission

*COM(2021) 252



Thank you!

© European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the <u>CC BY 4.0 license</u>. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.



APPENDIX 3: EUROPEAN COMMISSION VICE-PRESIDENT MARGRETHE VESTAGER SPEECH

Dear Ambassador Stefansson, dear Rectors and Vice-Rectors, dear friends,

It is a pleasure to be with you tonight.

First, because being surrounded by Nordic fellows always makes me feel on step closer to home. And second, because the topic we're discussing is one dear to my heart. And that is the great contribution that universities bring to the twin digital and green transitions.

I am sure my colleagues Themis Christophidou and Signe Ratso did a great job leading you through our European policies on education earlier today. So instead, I will share with you three assumptions that drive our daily work.

First, we will continue to base our work on excellence. No compromise here!

Europe - and its universities - is home to amazing talents and worldwide pioneers. Ultrasounds were developed in the university of Lund. mRNA Covid vaccines that millions of people received was developed by Professor Uğur Şahin, a grantee of the European Research Council. Soon we may even be able to take medication with a simple patch on our skin – that's what students in University of Copenhagen are working on as we speak.

Those inventions blossomed on the excellence of Europe's academic environment. And we must not lower the bar. That's why our European strategy for universities puts excellence and inclusion as the two main distinctive features of our higher education.

As part of the Erasmus Plus program, our European Universities Initiative connects several universities from different countries into one common campus. In doing so, we bring Europe to life for thousands of students no matter where they're from. We also allow top-class scientific research to travel across borders. This is how we put ourselves in a position to find the best possible solutions to today's most pressing issues - climate protection, digitalisation, health, democracy, security... I am delighted to see that 44 Nordic institutions are participating in the European Universities Initiative.

We follow the same spirit in our innovation agenda. Our Innovation Hubs put together universities, big and small businesses, municipalities, research centers to solve a defined challenge. Together they develop solutions which they can rapidly test and take to the market. Some of you here are probably familiar with the "Innovation Hub North". Partners from Sweden, Denmark, Finland, Norway and the Baltics are developing solutions for sustainable urban mobility. They're testing them in the streets of Helsinki, Stockholm, Tallinn or Copenhagen. That's Europe at its best.

All this is happening because all across our region, talents come together.

Which leads me to my second assumption: the digital and green transitions are only as successful as the people who make it. So we have one urgent priority: to develop

skills. Our targets are ambitious: minimum 80% of the European population should have basic digital skills by 2030, and 20 million new ICT specialists, including a lot more women.

But that's not enough. In the European Investment Bank's 2017 survey, almost 80% of firms mentioned lack of skilled staff as an obstacle to their investments. So it's not only about creating ICT specialists, it's about equipping all workers with digital skills. Farmers trained to use GPS data to track their yields. Shop owners able to develop an e-commerce solution. Doctors using robotic surgery tools. It is about equipping specialists in various areas with the capacity to have also advanced digital skills, so they can innovate in their sectors and make the most of digital opportunities.

This will not happen without you. Because this future workforce is currently sitting - and learning - on the benches of your universities. This is why we must continue to work hand in hand to make sure we build today the talents that the market will need tomorrow.

In her State of the Union speech the Commission's President announced 2023 as the year of skills. This is great news, since it means further investments in education and upskilling.

Third and last assumption - our universities are the beacon of our values.

We have a European way of going digital. It consists in producing and mastering advanced technology of course. But even more so, it consists in making technology work for people. That means technology that we can trust because it respects who we are, what we believe in, and it sets the limit to what we wish - or don't wish - to share about ourselves. It also means technology that safeguards our democracy.

For instance, we have seen how one same technology used to recognise our face on a picture can be used to put a whole population under surveillance. We can't let digital tools slip through our fingers.

Universities have a huge role to play to help us spread this vision of a secure, trustful digitalisation among the very people who will make this digitalisation happen.

I know some - if not most - of you are already well ahead on this track.

Before I close, I would like to thank the Nordic University Association for inviting me to join you tonight. With your commitment to excellence and your high level of collaboration, Nordic universities are inspiring for higher education institutions everywhere across Europe. Especially for gender equality, climate change, sustainability and open science.

I am asking all of you to remain this inspiring driving force for Europe.

Thank you.

APPENDIX 4: EUROPEAN RESEARCH COUNCIL PRESIDENT MARIA LEPTIN SPEECH

Dear Rectors and Vice Rectors, ladies and gentlemen.

Thank you for inviting me to join this final session of your event. I hope that you have had a productive and inspiring time here in Brussels so far!

I'm very pleased to see so many of you from around the Nordic countries here today. I happen to be back from a recent, fruitful visit to Oslo and, a few months ago, we held a Scientific Council meeting against the backdrop of the midsummer light in Helsinki.

The Nordic countries have a longstanding tradition of scientific excellence and certainly belong to those that invest most into science per capita in the world [1].

So, as I'm here today to talk about the idea of excellence in research and where it might be headed, I know I'm amongst friends.

If you look at certain recent trends, it is possible then it is possible to conclude that the concept of excellence in research is being called into question.

We see politicians and policymakers who insist that research should be targeted or directed at specific challenges or goals in order to have any impact.

We see decreasing budgets for basic research and increasing support for innovation in some countries, or by some funders.

We see international collaboration being subject to increasing scrutiny and restrictions.

We see attacks on academic freedom and the questioning of the role of experts by illiberal politicians and governments around the world, including here in Europe.

Some would even argue that the recently published "Agreement on Reforming Research Assessment" is partly an attempt to move away from the idea of excellence in research.

Taking these things together, an observer might start to think that the ideas of pursuing knowledge for its own sake and of excellence in research are somehow discredited or outdated.

I want to be very clear today. The idea of excellence in research is not going away any time soon and I will do my best to make this true!

Let us take the Agreement on Reforming Research Assessment. On 8 July, the final version of the agreement was presented at a Stakeholder Assembly of over 350 organisations from over 40 countries.

Doesn't this level of interest show that something is seriously wrong with our current practices? Do we need to change criteria related to scientific excellence?

I do not believe this to be the case.

If you look at the Agreement it is rather well balanced. The vision it sets out is "that the assessment of research, researchers and research organisations recognises the diverse outputs, practices and activities that maximise the quality and impact of research". And to do this "requires basing assessment primarily on qualitative judgement, for which peer review is central, supported by responsible use of quantitative indicators."

So the reformers are not attempting to lower the quality of research. Rather the intention seems to be the opposite.

What they are questioning is taking short cuts for judging excellence, for example, by considering Journal Impact Factors or H-Indices rather than a researcher's contribution to knowledge or their grant proposal. It is ironic that sometimes those who espouse "excellence" choose to take these shortcuts, and do not take the time and effort required to ensure a high quality evaluation.

As you know, the European Research Council is based on a simple idea. We support the best researchers to work in Europe on their best ideas. The sole criterion for selection is scientific excellence.

This approach is critical to the success of the ERC and we have no intention of changing it. It has been our clear strategy ever since the day the ERC was launched 15 years ago, after extensive efforts from the scientific community. It was indeed also thanks to Scandinavian efforts that the creation of an ERC got firmly on the political agenda, first through independent Swedish research personalities, notably Prof. Dan Brändström, and then during the Danish EU Presidency in 2002 [2].

But at the heart of this approach is an unrelenting focus on the quality of our evaluations. The governing body of the ERC, the Scientific Council, constantly hears feedback before and after every grant competition, which we take into account when we make adjustments to our "Work Programme" and guidance for applicants and members of our evaluation panels.

The ERC's peer review evaluation process has been carefully designed to identify scientific excellence irrespective of the gender, age, nationality or institution of the Principal Investigator and other potential biases. It takes career breaks as well as unconventional research career paths into account.

The evaluation process ensures that Principal Investigators have the professional competence and qualifications required to carry out their proposed project. The evaluations are monitored to guarantee transparency, fairness and impartiality in the treatment of proposals.

We are thus clearly committed to "basing assessment primarily on qualitative judgement, for which peer review is central". Indeed, the ERC Scientific Council has been closely

following the debate on reforming research assessment. The Council set up a task force on research assessment, which I chair, at its December plenary meeting last year.

The task force is currently looking at the various proposals and recommendations for reform in the light of the ERC's own current practices. Our aim is to reach some conclusions later this year, and we will make our thinking and outcomes public. This is a very important topic with wide implications and we want to take our time and get this right.

But what is not in question are the basic principles of the ERC. The sole criterion of scientific excellence is here to stay at the ERC!

Regarding other potential threats to the idea of research excellence, unfortunately I believe that some of these are real. But I also believe that history shows that these threats can be countered.

I am sure we all agree that the freedom to engage in scientific inquiry, to pursue and apply knowledge, and to communicate openly is essential.

It is indeed concerning that even now, in certain countries, even in Europe, this hard-won right is contested. This reminds us that we need to always be vigilant and not take these freedoms for granted. With academic freedom enshrined in the constitution in my own country, and therefore taking its profound importance for granted, I would wish for a broader recognition of its value.

But it is also important to stress that with freedom comes responsibility. We have a duty to conduct and apply science ethically and with integrity.

Regarding the balance between supporting basic and applied research, I think that the arguments for supporting basic research need to be repeated over and over again. It is much easier for politicians to say we are spending money on finding a cure for cancer than it is to say we are looking into fundamental processes of cell division. But without the latter, the former is not possible. And I do think that people can understand that. So maybe it is a question of reminding them.

It is also important to show that this approach can be successful. Take the example of Ugur Sahin. It is thanks to his research and that of his colleagues that we were able to have a vaccine against Covid-19 in record time (Pfizer/BioNtech). The same applies for Adrian Hill, who is one of those behind the Astra Zeneca vaccine. Both of them are ERC-funded scientists who used their freedom to pursue a path they had not initially planned and that nobody needed to tell them to take.

Since the ERC launched its first call for proposals in 2007, we have funded over ten thousand of the best scientists in Europe to pursue original and creative research leading to advances at the frontiers of knowledge.

And they have certainly done this. Since 2007, ERC-funded researchers went on to win nine Nobel Prizes, six Fields Medals and eleven Wolf Prizes. In February, two ERC grantees were awarded the latest Wolf Prize in Physics for pioneering contributions to ultrafast laser science and attosecond Physics [3]. And we will be watching with excitement the upcoming Nobel Prize announcements!

Beyond this, every year we ask a group sof independent experts to look at the results of the projects which the ERC has funded in the past. The latest such exercise found that 81% of projects funded by the ERC resulted in a scientific breakthrough or major advance [4]. Over 200,000 scientific publications have been produced by our grantees recording the results of their work. And these publications of ERC grantees are cited by other scientists seven times more than average. That shows their significance within their fields.

But it is not only in the field of basic research that we see such positive outcomes. We find that the work of ERC grantees is making strong contributions to political priorities. The ERC has just published its own analysis of all projects it funded under Horizon 2020 [5]. A series of fact sheets document the diversity of the funded research with projects in many emerging areas of science. 34% of the analysed ERC projects are likely to contribute to health policies, including in cancer, brain and human mind research. One in ten projects addressed problems linked to the digital transition, half of which were in the area of artificial intelligence. And, 14% were found to be relevant to climate policies and green solutions.

Similarly, a recent study found that out of the 2,500 EU-funded publications referenced in the four reports of the assessment cycle of the sixth Intergovernmental Panel on Climate Change (IPCC), 854 of these publications came from ERC projects. Not bad for projects chosen in a completely bottom-up way!

At current budget levels, the ERC is not able to fund all the proposals rated as excellent by its extremely competitive peer review process. The current success rate in our calls (less than 15%) is also lower than many equivalent national funding agencies. And that is despite the rather strict resubmission restrictions which we impose on unsuccessful applicants.

So if you ask me what I would hope to achieve, then it would be to convince the EU's policymakers to increase their investment in curiosity-driven frontier research in the next framework programme.

The overall envelope for research investment is also key of course. Ideally, we want enough investment in both fundamental and applied research and not to have to trade them off against each other.

Funding for fundamental research and for innovation can be complementary. Relations between the European Innovation Council Advisory Board and the ERC Scientific Council are very cordial and we have a good collaboration, including a joint working group that

meets regularly. We released a joint statement last year setting out this relationship [6]. We both understand that research and innovation are two sides of the same coin.

It is very interesting to note that 25 out of 42 recipients of the European Innovation Council's new "Transition" funding originated from research funded by the ERC. The new grants will help take breakthrough technologies closer to deployment [7].

I hope I have shown that it is possible to make a strong case for supporting fundamental research chosen on the sole criterion of scientific excellence. And I will make this case for as long as I am the President of the ERC! But there is no magic formula which will unlock higher budgets for research funders.

And unfortunately, two decades after the EU set itself the ambitious goal to become, by 2010, "the most competitive and dynamic knowledge-based economy in the world", EU R&D investment is still far from its 3% target and below its major competitors.

Turning to another issue, I am personally a strong supporter of international collaboration. Scientific progress relies on connected knowledge communities and these communities are not national. These communities are the way knowledge spreads around the world and becomes widely used. From the point of view of any one region or country the majority of new and existing knowledge is developed outside that region or country. A national science base is not therefore primarily about producing "national science". It is about gaining access to all the knowledge that has ever been created or will ever be created anywhere in the world.

Indeed, it would be catastrophic for any modern country if suddenly one day it had to rely only on the technologies that had been created within its geographical borders, even for the most advanced countries.

This is one of the reasons why the ERC's Scientific Council have been strong supporters of the association of Switzerland and UK to Horizon Europe. Both countries are key parts of the European Research Area - historically, geographically and scientifically. We are still fervently hoping that a way can be found for them to associate. We are stronger together.

From a scientific perspective the preference for scientific collaboration is very clear. Science is about understanding the world as it is. That is why there is no such thing as European science or Russian science or Chinese science, there is only science. International collaboration enriches science and helps us learn more, and I very much support it.

However, we cannot wish away politics. If and when a country or organisation or individual commits sufficiently egregious acts, then it becomes impossible to justify working with them any longer. That is why the ERC Scientific Council felt it necessary to condemn the Russian attack on Ukraine, and express our strongest support for Ukraine and its scientific community [8] and installed a programme to support them

Let us continue to stand up for excellence in science together and do what we can to help the world and our communities!